A NEW SUBSPECIES OF SOLAROPSIS GIBBONI FROM BRASIL

BY JOSEPH BEQUAERT AND W. J. CLENCH

Solaropsis gibboni fairchildi new subspecies. Plate 9, figs. 6-7.

Description.—Shell solid, somewhat depressed with only a slight indication of a peripheral keel. Whorls 5, nearly rounded and strongly convex. Color somewhat darker than the typical form with the pattern arrangement similar.

Gt. diam. 43	Less. diam. 36.6	height 23 mm.	Holotype.
45.5	38.7	25.5	Paratype.
43	35.6	23.5	"
41	34.5	22.5	"

Holotype.—Mus. Comp. Zoöl. no. 57240. Anapolis, Goyas, Brasil. G. B. Fairchild collector, July, 1936. Three adult and one immature paratype from the same locality.

Remarks.—This subspecies differs from the typical form by being much smaller and proportionally less depressed. A specimen from Bogotá, Colombia, of S. gibboni measures 61 mm. in greater diameter with a height of 27.5 mm. The peripheral keel of S. gibboni is generally quite sharp and prominent, while in our new form it is nearly obsolete. All other characters appear to be similar to those of the typical form.

ON THE HISTORY AND STATUS OF LORA GISTEL

A recent inquiry from the West Coast caused us to examine the credentials of the genus *Lora*, which has been introduced into our catalogues as generic name for the boreal Turridae formerly known as *Bela*. The data are as follows. In all cases they are taken from the original sources.

Johannes Gistel, 1848, in his Naturgeschichte des Thierreichs für höhere Schulen, proposed many generic names as substitutes for names he did not like, giving a list of them in the Bevorwortung of his volume, pp. viii—xi. This entry is found on p. ix:

"Defrancia (Millet, Gastrop. D. viridula O. Fabr.): Lora Gistel."

Thus, Gistel obviously proposed Lora as a substitute for Defrancia, and cited "D. viridula O. Fabr." simply as an example,

but without designation of type. It was not in Millet's original list of Defranciae. In such cases, the first type subsequently designated for either of the names becomes automatically the type of both (International Rules, Art. 30, II, f).

The first type designation for either is that of Dall (1908, Bull. M. C. Z. 43:260), who chose for *Defrancia*, *D. pagoda* Millet. As *Defrancia* is a homonym, the genus will stand as *Pleurotomoides* Bronn, 1831, of which *Defrancia* Millet and *Lora* Gistel are synonyms.

Later type designations for Lora itself involve Tritonium viridulum O. Fabricius, 1780, which was described in Fauna Groenlandica, p. 402, from Greenland. While there are no figures in this work, the description is good, for the time, and the species, as Admete viridula (O. Fabr.), is everywhere accepted. However, H. P. C. Möller, 1842, mistakenly identified T. viridulum with a somewhat similar "Bela," and redescribed Fabricius' species as Admete crispa (Index Molluscorum Groenlandiae, p. 15). The (new) genus Admete he ascribed to Kröyer. Admete viridula (O. Fabr.) has a wide distribution in northern seas. A closely related form, perhaps not specifically separable, A. couthouyi Jay, occurs off New England from a few fathoms depth down to over 800 fms. It is extremely variable. The most fully developed forms of Admete show one or two weak columellar folds, which caused it to be referred to the Cancellaridae; other specimens show none, the columella smooth and conspicuously but obliquely truncate.

In the above-mentioned paper of 1842, p. 14, Möller described Defrancia viridula, which he identified with Tritonium viridulum O. Fabr. He did not regard it as a new species, but merely as a transfer of Fabricius' species to another genus. The true identity of Möller's shell seems to have remained unknown until G. O. Sars (1878, Mollusca Regionis Arcticae Norvegiae, p. 235) found it to be identical with Bela kobelti Verkrüzen, from Vadso,

¹ The specific name cannot stand as *Bela viridula Möller*, however, as he was not proposing a new name for it, but considered it to be Fabricius' species. It will stand as *Bela kobelti* Verkrüzen; or, since *Bela* is no longer tenable for this boreal group, it will probably be called *Oenopota kobelti* (Verkr.). See International Rules, Art. 31.

Norway, by a comparison of Norwegian specimens with Möller's material in Copenhagen.

Dall perpetuated Möller's confusion by his statement under Lora (1918, Proc. U. S. N. Mus. 54: 328): "sole example Tritonium viridulum Fabricius, which is a Bela, probably B. exarata Möller, according to the type specimen." This is about as misleading as it could be, since Tritonium viridulum Fabr. is not a Bela but an Admete. His "probably B. exarata" can be ignored, since we have so good an authority on northern mollusks as Sars, who positively states that Möller's viridula is Bela kobelti, a species allied to exarata but quite distinct.

Grant and Gale (1931, Mem. San Diego Nat. Hist. Soc. 1: 512), relying upon Dall, say: "Type (by subsequent designation, Dall 1918), *Tritonium viridulum* O. Fabricius 1780, + *Bela exarata* Möller according to the type specimen (fide Dall), not *Defrancia viridula* Möller, 1842." This includes "*Bela*" in one clause and excludes it in the next.

The only type designations for *Lora* exclusively appear therefore to be hopelessly muddled, since they include two species of two genera. Dall's statement would make *Lora* a synonym of *Admete*, since we cannot accept his conclusion that *Tritonium viridulum* "is a *Bela*, probably *B. exarata* Möller." This error invalidates his statement under *Bela* in Proc. U. S. N. M. 54:318.

Of course Gistel did not know that more than one genus was involved. He thought that he was citing Fabricius' species, as he does not mention Möller.²

The synonymy of Pleurotomoides will stand as follows.

Defrancia Millet, 1827, Mém. Soc. Linn., Paris 5: 437. Proposed for five species, including D. pagoda Millet, which was designated the type by Dall, 1908, Bull. M. C. Z. 43: 260. Not Defrancia Bronn, 1825, Syst. Urwelt. Pflanzenth. pp. 13, 42 (Polyzoa).

Pleurotomoides Bronn, 1831, Ital. Tert.-Gebilde p. 47. Substitute for *Defrancia* Millet not Bronn, and taking the same type, D. pagoda.

² Probably Möller was the source of Gistel's information, but this is only inference.

Lora Gistel, 1848 (see above). Substitute for Defrancia Millet, and taking the same type, D. pagoda.

The boreal "Belas" for which Lora has been used, will be known as Oenopota Mörch, type Fusus pleurotomarius Couthouy.

H. A. PILSBRY

Dr. H. B. Baker, Dr. Paul Bartsch, Dr. S. S. Berry and Dr. Wm. J. Clench, members of the A. M. U. Committee on Nomenclature, agree with the above conclusions.

PECTEN PUGETENSIS AT NEWPORT BAY, CALIFORNIA

BY WENDELL O. GREGG

The entrance of Newport Bay, California, is guarded on the east by a rocky point and on the west by an artificial breakwater. This entrance is rather narrow in comparison with the size of the bay and consequently the current here is very swift on changing tides. The incoming tides bring in many deep-water forms which have been found along this rocky point and on sand bars within the entrance of the bay.

In March, 1926, while collecting along the rocks on the east side of the entrance of this bay at very low tide, a single specimen of *Pecten pugetensis* Oldroyd was found. It was attached to a rock by a byssus as noted by Oldroyd in the specimens taken at Puget Sound at low tide. The specimen was moderately spinose over the left valve and delicately so over the distal four millimeters of the right valve, the spines occurring over a much wider area over the posterior third of right valve. The measurements were: height, 29.3 mm.; length 25.0 mm.; convexity, 10.7 mm.; hinge line, 16.3 mm.

Oldroyd² originally described this pecten as a subspecies of *P. islandicus* Müller, making brief comparisons with *islandicus*. The latter does not now occur on the Pacific Coast of North America south of Bering Sea, but is said to have occurred on the Pacific Coast as far south as Deadman Island, San Pedro,

¹ Publications, Puget Sound Biological Station, vol. 4, p. 18.

² NAUTILUS, vol. 33, p. 136.